

THE BRITISH CORPORATION REGISTER OF SHIPPING AND AIRCRAFT

SURVEY FOR FREEBOARD

1992.

39542
LK

STEAMER, ~~TANKER, SAILER~~ "FREEMAN HATCH" WITH TIMBER DECK CARGO

Nationality BRITISH Builders' Name and No. of Ship LEATHEN D. SMITH 3/8 Co.

Port of Registry LONDON ✓ STURGEON BAY WIS. No 417.

Official Number 168494 ✓ Owners /MAN: WM. CORY & SONS LTD. FOR M.G.W.T.

Gross Tonnage ~~225~~ 1793.

Date of Build JAN 1943 Port and Date of survey GLASGOW. JULY 1943.

Name of Surveyor A. MACARTHUR.

Particulars of Classification A.B. + A.1 (E). Names of Sister Ships WALDO HILL, WILLIAM HOWLAND, FREEMAN HATCH.

Type of Superstructures POOP, BRIDGE & F.C.L.

Trade of Ship

Service Endorsement if any NONE.

SUMMER FREEBOARD recommended amidships from centre of disc to top of deck line, (.....wood.....steel)

TROPICAL FRESH WATER LINE above centre of disc	9 1/4"	Corresponding Freeboard	2' - 6 1/4"
FRESH WATER LINE " " "	4 3/4"	" "	1' - 9"
TROPICAL LINE " " "	4 1/2"	" "	2' - 1 1/2"
WINTER LINE below " "	4 1/2"	" "	2' - 1 3/4"
WINTER NORTH ATLANTIC LINE " " "	6 1/2"	" "	2' - 10 3/4"
		" "	3' - 0 3/4"

SUMMER TIMBER FREEBOARD recommended amidships from top of deck line (10 3/4" ABOVE)

TROPICAL FRESH WATER Timber line above L.S.	9 1/2"	Corresponding Freeboard	1' - 7 1/2"
FRESH WATER " " " "	4 3/4"	" "	0' - 10"
TROPICAL " " " "	4 3/4"	" "	1' - 2 3/4"
WINTER " " below "	6 1/4"	" "	1' - 2 3/4"
WINTER NORTH ATLANTIC " " " "	17 1/4"	" "	2' - 1 3/4"
		" "	3' - 0 3/4"

Number of years recommended for load line certificate

Dated Expire Jan 8th, 1948

Issue Aug 5th 1943

Deeper Loading Endorsement Jan.

The scantlings and protective arrangements being in accordance with the Load Line Rules it is submitted that the freeboards be assigned

Julian Hay.

Chief Surveyor

Passed at a meeting of the Committee of Management of the British Corporation Register of Shipping and Aircraft

on the

1st September 1943

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W. H. C. Secretary

Lloyd's Register Foundation

Reg. Dim. 250.4' x 42.15' x 18.4'

COMPUTATION OF FREEBOARD

Length on summer load line 250'-0" Moulded Breadth 42'-1" Moulded Depth 30'-5" Depth of Keel 5'-8"
Moulded displacement (ex bossing) at moulded draught of 85 per cent. of moulded depth Tons 3865
Co-efficient of fineness for use with tables $\frac{\Delta \times 35}{L \times B \times D \times .85} = \frac{3865 \times 35}{250 \times 42.08 \times 30.42 \times .85} = .7406$
Displacement and tons per inch immersion in salt water at summer load line 4030 20.49 T.P.L.
Moulded depth 30'-4.18 Deduction for Fresh Water $\frac{\Delta}{40T} = \frac{4030}{40 \times 3865} = .025$ inches
Stringer Plate .042 Round of Beam Correction -
Sheathing on exposed deck T $(\frac{L-S}{L})$ - Ships Round of Beam 10'-12 inches
Rise of floor (in sailers) - Standard Round of Beam $\frac{B \times 12}{50} = \frac{42.15 \times 12}{50} = 10.10$
Depth for Freeboard (D) 20'-4.60 Difference .02
Table Depth 4.15 16'-6.64 Restricted to
Depth Correction $\frac{250}{130} \times 3.793 = 7.793$ Correction $\frac{\text{Difference}}{4} \times (1 - \frac{E}{L}) = \frac{.02}{4} \times (1 - \frac{5.8}{42.15}) = .0027 = \text{Nil.}$
If restricted by superstructures = 7.793 + 0.0027 = 7.7957

	Enclosed Length	Length of Overhang	Height	Mean Covered Length (S)	Height Correction	Effective Length (E)
Poop	21.70	-	7'-6"	21.70	-	21.70
Raised Quarter Deck	-	-	-	-	-	-
Bridge	63.00	F 2.25 A	8'-0"	69.75	-	67.94
Forecastle	25.802	-	7'-0"	25.80	-	25.40
Trunk Aft	-	-	-	-	-	-
" Forward	-	-	-	-	-	-
Tonnage Opening Aft	-	-	-	-	-	-
" " Forward	-	-	-	-	-	-
Totals				117.25		114.84

Standard Height of Superstructure 6'-0"
" " R.Q.D. -
Percentage covered S/L = 46.40%
" " E/L = 45.94%
" from Table line A, B, (corrected for absence of forecastle if required) 32.549%
Percentage from Table by interpolation for Bridge less than .2L if required = 31.3255 = 10.091 OFF.
Deduction = 31.3255 = 10.091 OFF.
Percentage from Table for Tankers (or Timber ships) = 31.3255 = 10.091 OFF.
Deduction = 31.3255 = 10.091 OFF.

Station	Actual Sheer	Standard Sheer	Effective Sheer	S.M.	Product
18" Excess A.P. POOP HEIGHT	36.00	35.00	54.00	1	54.00
1/2 L from A.P.	16.00	15.58	16.00	4	64.00
1/2 L from A.P.	6.00	3.85	4.00	2	8.00
Amidships	-	-	-	4	-
1/2 L from F.P.	8.00	7.70	8.00	2	16.00
1/2 L " "	31.50	31.16	31.50	4	126.00
F.P.	71.00	70.00	71.00	1	71.00
				18	339.00
Effective Mean Sheer					18.83
Standard " " .05L + 5					17.50
Difference					1.33

Mean Actual sheer aft = MORE THAN 1.
" Standard " " = MORE THAN 1.
Mean Actual sheer forward = MORE THAN 1.
" Standard " " = MORE THAN 1.
Length of enclosed superstructure forward of amidships = Length of Ship
Length of enclosed superstructure aft of amidships = Length of Ship
Sheer Correction = Difference $\times (75 - \frac{S}{2L}) = 1.33 \times (75 - \frac{18.83}{2 \times 250}) = .6856$ OFF.
If limited on account of midship superstructure = -
" to maximum allowance of 1 1/2 ins. per 100 ft. = -

TABULAR FREEBOARD corrected for flush deck if required = 32.30

Correction for co-efficient = $\frac{.741 + .68}{1.30} = 1.045$ = 33.75 DRAUGHTS AND SEASONAL CORRECTIONS

	+	-	Sailer, Tanker, Steamer	Timber
Depth correction	7.30	-		
Deduction for superstructures	-	10.09		
Sheer correction	-	0.69		
Round of Beam correction	-	-		
Correction for thickness of deck amidships	-	-		
Other corrections, scantlings, etc.	-	-		
	7.30	10.78		
Summer Freeboard in Inches	2'-6 1/2"			
Additional allowance for superstructures on Timber carrying ships				
Summer Timber Freeboard in Inches	1'-7 1/2"			
Depth to Freeboard Deck in feet	20.462			
Summer Freeboard in feet	2.521			
Moulded Draught (d)	17.941			
Addition for Keel	.052			
Extreme draught	18.093			
Deduction for Tropical and addition for Winter freeboard d/4 = 4 1/2 ins.				
Addition for Winter North Atlantic (if required)				
Deduction for Tropical Timber Freeboard d/4 = 4 1/2 ins.				
Addition for Winter " " d/4 = 4 1/2 ins.				
" " N.A. Timber Freeboard (if required)				

Form LL. 4.D.

THE BRITISH CORPORATION REGISTER OF SHIPPING AND AIRCRAFT SURVEY FOR FREEBOARD CONDITIONS OF ASSIGNMENT

SHIPS NAME "FREEMAN HATCH" OFFICIAL NUMBER 168494.
Nationality and Port of Registry BRITISH, LONDON

PARTICULARS OF SUPERSTRUCTURES, TRUNKS, CASINGS, DECKHOUSES

	Coaming	Plating	Stiffeners	Spacing	End Attachments	No. and size of Openings	Height of Sills	Height of Casings
Poop Bulkhead	30	30	4x4x3/8 LBS. 2'-0" IN BOAT KEEL PLATE DATA ON 4x3x5/8 LBS. INVERT 2'-5" 00000. ANGLE ELSEWHERE	2'-0"	REV. PLATE DATA ON ALT. STIFFEN.	NONE	-	7'-6"
Bridge Aft Bulkhead	25	25	5x3/2x8 LBS. INVERT 2'-0" 5x2x4 LBS. 3'-0" 3'-6" 6x4x1 1/2 LBS. 2'-1" ANGLE ELSEWHERE	2'-0"	-	2x3'-0" x 4'-0" 1C1'-8" x 4'-6"	2'-0"	8'-0"
" Forward "	46	36	5x3/2x8 LBS. INVERT 2'-1" ANGLE ELSEWHERE	2'-1"	-	2x2'-6" x 4'-6"	2'-0"	8'-0"
Forecastle Bulkhead					OPEN FORECASTLE			7'-0"
Trunk, Aft								
" Forward								
Exposed Machinery Casings on Freeboard or R.Q. Decks								
Exposed Machinery Casings on superstructure decks	50	25	3x2x1 1/2 LBS. 2'-3" 3x2x1 1/2 LBS. 2'-0"	2'-3"	-	2x1'-9" x 5'-3" EACH P.S.	15" FWD. 8" AFT.	8" ABOVE BOAT DECK
Machinery Casings within Superstructures not fitted with Cl. 1 closing appliances	50	5 1/2	3x2x1 1/2 LBS. 2'-3" 3x2x1 1/2 LBS. 2'-0"	2'-3"	-			
Deckhouses on flush deck ships								

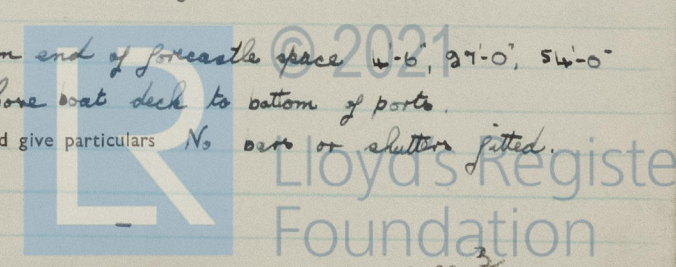
PARTICULARS OF CLOSING APPLIANCES (state if capable of being manipulated from both sides)

Poop Bulkhead	NO OPENING.
R.Q.D. "	-
Bridge Aft Bulkhead	HINGED STEEL W.T. DOOR & PORTABLE STEEL PLATES SECURED BY HOOK BOLTS.
" Forward "	HINGED STEEL W.T. DOORS.
Forecastle Bulkhead	OPEN.
Exposed Machinery Casings on Freeboard or R.Q. decks	-
Exposed Machinery Casings on superstructure decks	Hinged plate doors. Both sides.
Machinery Casings within superstructures not fitted with Cl. 1 Closing Appliances	-
Deck houses on Flush Deck ships	-

PARTICULARS OF FREEING ARRANGEMENTS

	Length of Bulwark	Height of Bulwark	No. and size of Freeing Ports each side	Area each side	Rule Area
FORWARD After Well	49'-3" (INC. OPEN FIELD)	3'-6"	1=9'x9'-0", 2=9'x13'-6", 3=9'x13'-6"	27.0	20.
AFTER Forward Well	67'-6"	3'-7"	1=9'x9'-0", 2=9'x9'-0", 3=9'x9'-0"	20.25	13.

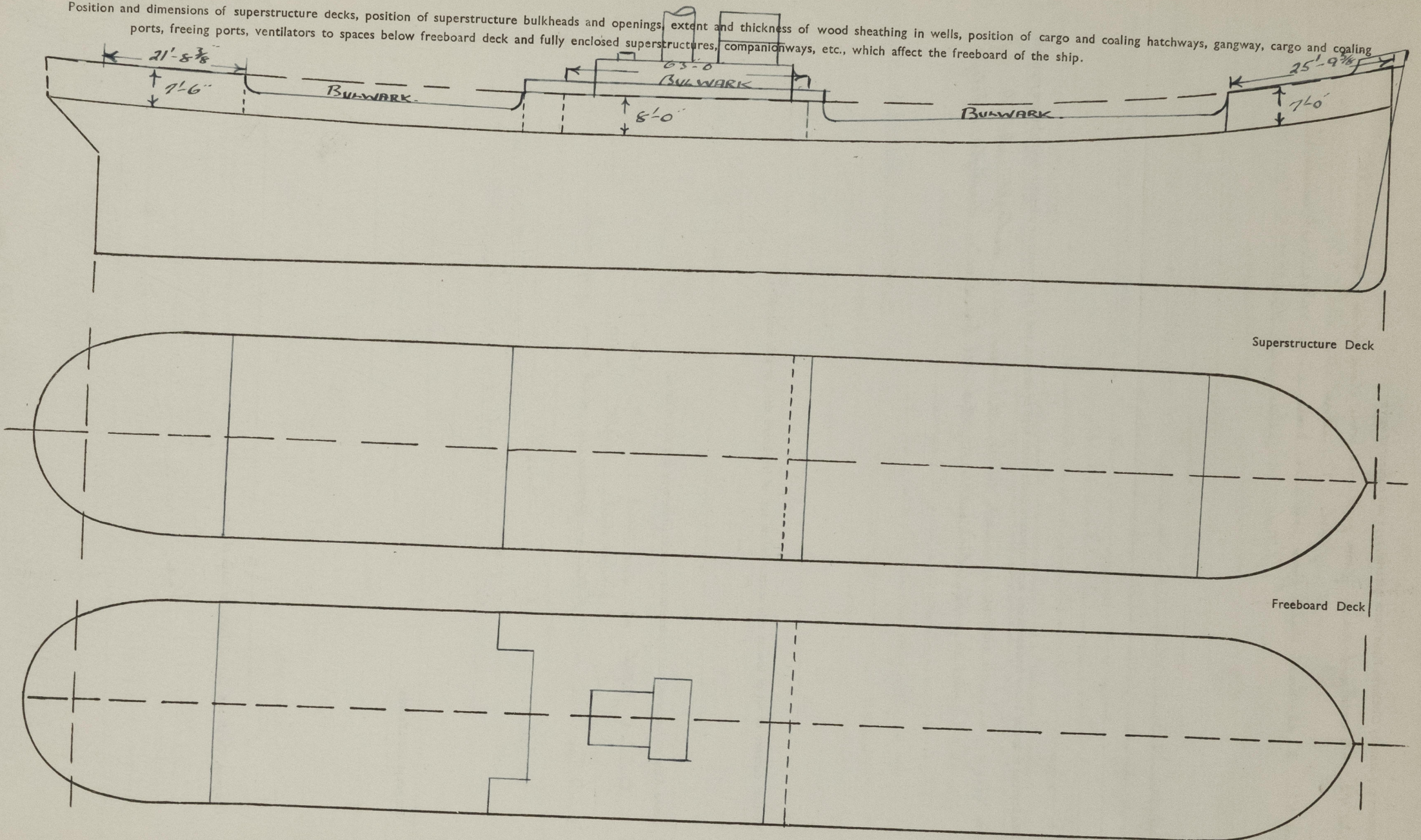
State fore and aft position and height above deck to bottom of port, for each port
After Well From end of bridge 9'-0", 27'-0", 49'-6"
Forward Well From end of forecastle space 4'-6", 27'-0", 54'-0"
5' above boat deck to bottom of ports.
State whether freeing ports are fitted with shutters, bars or rails, and give particulars No bars or shutters fitted.
Give particulars of freeing port area, etc., on superstructure decks



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Position and dimensions of superstructure decks, position of superstructure bulkheads and openings, extent and thickness of wood sheathing in wells, position of cargo and coaling hatchways, gangway, cargo and coaling ports, freeing ports, ventilators to spaces below freeboard deck and fully enclosed superstructures, companionways, etc., which affect the freeboard of the ship.



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PARTICULARS OF ALL HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS

Number and description of Hatchway from forward	N ^o . 1.	N ^o . 2.	N ^o s. 3 & 4.	2-HOLD ACCESS	ACCESS TO F. PEAK	ACCESS TO B. LOCKER	FOR ^y HOLD ACCESS SPAR DECK.	2-TWEEN DECK COALING SPAR DECK.	2-TWEEN DECK COALING SPAR DECK.	1-TWEEN DECK ACCESS SPAR DECK.	1-TWEEN DECK COALING BRIDGE DECK.
Dimensions of Hatchway	21'-0" x 31'-6"	21'-0" x 34'-3"	21'-0" x 27'-0"	15" x 23"	1'-6" x 3'-0"	1'-6" x 3'-0"	15" x 23"	2'-5 1/2" x 22'-5"	5'-10" x 3'-2 1/2"	15" x 23"	3'-6" x 9'-0"
COAMINGS											
Height above steel deck	3'-8"	3'-8"	3'-8"	2'-5"	1'-6"	1'-6"	2'-0"	9"	11"	9 1/2"	1'-6"
Thickness	1/4"	1/4"	1/4"	3/8"	3/8"	3/8"	3/8"	1/2"	5/16"	3/8"	5/16"
Stiffeners	7 x 6 x 17.9 LB ANGLE	7 x 6 x 17.9 LB ANGLE	7 x 6 x 17.9 LB ANGLE	-	-	-	-	-	-	-	-
Brackets on Stays	4 OFF 1/4" x 1/2" x 1/4" THX	4 OFF 1/4" x 1/2" x 1/4" THX	4 OFF 1/4" x 1/2" x 1/4" THX	-	-	-	-	-	-	-	-
HATCH BEAMS											
Number	5	5	4								
Spacing	5'-3"	5'-8 1/2"	5'-6 3/4"								
Scantling and Sketch	8 x 12 1/2" x 24" x 1/2" ER 8 x 12"	As. l.	As. l.								
Bearing Surface and thickness of carriers or sockets	1 1/4" x 3"	1 1/4" x 3"	1 1/4" x 3"								
FORE AND AFTERS											
Number											
Spacing											
Unsupported lengths											
Scantling and Sketch											
Bearing Surface and thickness of carriers or sockets											
HATCH COVERS											
Material	WOOD (FIR)	WOOD (FIR)	WOOD (FIR)	STEEL	STEEL	STEEL	STEEL	WOOD (FIR)	STEEL	STEEL	WOOD (FIR)
Thickness	2 5/8"	2 5/8"	2 5/8"	3/8"	3/8"	3/8"	3/8"	2 5/8"	30"	3/8"	2 5/8"
How Fitted	F + A.	F + A.	F + A.	HINGED TRANSVERSE	HINGED TRANSVERSE	HINGED TRANSVERSE	HINGED TRANSVERSE	TRANSVERSE	TRANSVERSE	TRANSVERSE	F + A.
Bearing Surface	3"	3"	3"	3/8"	3/8"	3/8"	3/8"	2 1/4"	1 1/8"	3/8"	3/8"
Spacing of Cleats	2'-0" ENDS 2'-0 1/2" SIDES	2'-0" ENDS 2'-1 1/2" SIDES	2'-0" ENDS 2'-0" SIDES	4 SCREW DOWN DOGS	6 CAM TYPE DOGS	6 CAM TYPE DOGS	4 SCREW DOWN DOGS	16" ENDS 2'-5" SIDES	2 CAM TYPE DOGS	4 SCREW DOWN DOGS	1'-3" ENDS 2'-0" SIDES
Number of Tarpaulins	2	2	2					2			2

Are tarpaulins in good condition and in accordance with rule requirements? Yes

Are lashings provided in accordance with rule requirements? LOCKING BARS (3/2" x 1/6" F. BAR)

Are wood fore and afters steel shod at all bearing surfaces?

Are battens and wedges efficient and in good condition? Yes.

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Give full particulars of the following :—
Fiddle, Funnel and Vent Coamings, Engine Room skylight and other openings in Machinery Casing tops and their means of closing (state height of coamings, type of fiddle covers, and if these are permanently attached in their proper positions)

Fiddle openings fitted with 1/2" plate hinged covers. Height of openings 4" above boat deck.

Flush Bunker Scuttles on freeboard and superstructure decks (state material, type of joints, etc., and if secured by hinge or permanent chain attachment)

None

Companionways on freeboard and superstructure decks (state material, height of doorway sills, type of doors, and if these can be closed and secured from both sides)

None.

Ventilators in exposed positions on freeboard, raised quarter and superstructure decks to spaces below freeboard decks and fully enclosed superstructures enclosed by Class 1 appliances (state height of steel coamings, pitch of rivets in deck connection, type of closing arrangements)

Freeboard Deck. 1 Fort. 16" Dia. coamings 3/8" thk. 10'0" high welded to deck & forecattle deck.
1 Aft. 16" " " " 10'0" " " " " & poop deck.
2 in Wells. 16" " " " 3'0" " " " " " " "

Closing appliances W.P. & C.C.
Bridge Deck. 5 in N°. 5" Dia. coamings 1/4" thk. 2'6" high welded to deck.
4 " 6 " " " 1/4" " 2'6" " " " "
1 " 8 " " " 1/4" " 2'6" " " " "
1 " 16 " " " 3/8" " 3'0" " " " "

Closing appliances W.P. & C.C.
Poop Deck. 8 in N°. 5" Dia. coamings 1/4" thk. 6" high welded to deck.
Closing appliances - metal screw down cover.
2 in N°. 5" Dia. coamings 1/4" thk. 2'6" high welded to deck.
Closing appliances W.P. & C.C.

Airpipes in exposed positions on freeboard, raised quarter and superstructure decks (state height to opening and if satisfactory closing arrangements are provided)

Freeboard Deck. 10 in N°. 4" air vent pipes fitted at sides - 2'2" high with 180° elbows & wood plugs for closing.
Forecattle Deck. None.
Bridge Deck. 4 in N°. 4" air vent pipes fitted at sides - 2'2" high with 180° elbows & wood plugs for closing.
2 in N°. 2'6" " " " " " " " " " "
Poop Deck. 1 " 4" " " " on poop - 2'2" " " " " " " " "

Scuppers and Sanitary Discharge Pipes (state material, type and number of valves)
2 in N°. 1 1/2" overboard disch. from poop with brass storm valves (not accessible) fitted 7" above spar deck.
1 in N°. 2" overboard disch. from poop with brass storm valve (not accessible) fitted 1'10" below spar deck.

Side Scuttles to spaces below freeboard and superstructure decks (state type or pattern, and if permanent or portable deadlights are supplied)
4 in N°. 16" Dia. ports in poop bulkhead fitted with hinged metal deadlight, watertight.
1 " " 16" " port in bridge (aft) bulkhead, fitted with hinged metal deadlight, watertight.

Vertical distance of sill of lowest side scuttle below top of freeboard deck at side amidships

Guard Rails on freeboard and superstructure decks (state type and where fitted)
Bulwark fitted at spar deck. height 3'6"
" " " bridge deck. height 4'10"
2 Tier pipe rail fitted on forecattle deck & on poop deck.

Gangways and Lifelines
None.

Gangway, Cargo and Coaling Ports in sides of ship
None.

SUPPLEMENTARY REQUIREMENTS FOR STEAMER CARRYING TIMBER DECK CARGOES
Do Superstructure and Machinery Casings comply with rules? Yes.
Is provision made for protection of steering gear? Yes.
Is emergency steering gear provided? Yes.

Are efficient sockets and eyes for lashings provided and properly spaced? Yes. Ex. plates fitted on inside of abutments with removable of plate 6" above deck - plates 11x15x1/4" welded, slot for shackle 3 1/2 x 3 1/2, spaced approx. 7'6" apart.
State particulars of longitudinal subdivision in double bottom

State particulars of Bulwarks and Rails
Bulwark fitted on spar deck, height 3'6"
" " " bridge " " " 4'10"
2 Tier pipe rail fitted on forecattle deck & poop deck.

Uprights, clips & sockets - clips on rail & sockets for. Uprights on deck, clips 2 1/2 x 1/2 flat bar formed to fit 8 x 8 upright. Deck sockets 3 1/2 x 1/2 flat bar formed to fit end of uprights (6 1/2 x 3) welded. 9 clips foot well at 8'2" spacing decreasing to 7'0" for forward uprights. 7 at 7'0" at after well. Uprights - timber 8 x 8 x 10'. Boltings: 7/8" galv steel shackle in ex. plate, chain 45 x 7/8", chain then shackled to galv wire rope.

Particulars of any Special Features in the construction of the Ship

Endorsement at first survey and at surveys for Renewal of Certificate:—
The fittings and appliances are in accordance with the particulars shown in the form and are in good condition